

REMARKS/ARGUMENTS

In the present Office action, claims 1-16 were examined. Claims 1-10 and 15 were allowed. Claims 11-14 and 16 were rejected. By this amendment, claim 14 has been cancelled. Claims 11 and 13 have been amended. No new matter has been added. Claims 1-13 and 15-16 are believed to be in condition for allowance.

Claim Rejections under 35 U.S.C. 112

The Examiner rejected claims 13 and 14 as being indefinite for failing to particularly point out and distinctly claim the subject matter of the present invention. With regards to claim 13, the Examiner noted that the Applicant claims a tip manufactured by a process as defined by claim 1 and, in claim 14, the use of a probe embodied by articles defined by claim 11.

Claim 13 is amended herein so as to recite an apparatus claim, as opposed to the previous method claim. Specifically, claim 13 is now directed to a scanning probe microscope comprising well defined elements. As a result, Applicant respectfully traverses the Examiner's grounds for rejection with respect to claim 13. Therefore, claim 13 is believed to be in condition for allowance. Claim 14 has been cancelled.

Claim Rejections under 35 U.S.C. 102

The Examiner rejected claims 11 and 12 as being anticipated by Andreoli et al. (WO 99/56176). The Examiner notes that Andreoli et al. discloses all of the elements of claims 11 and 12 of the present invention.

Applicant respectfully disagrees with the Examiner's characterization of Andreoli et al. Specifically, Andreoli et al. discloses a probe made in a so-to-speak "normal" arrangement, whereby the tip is placed "on top" of the carrier/cantilever, i.e., on a carrier surface perpendicular to and facing the sample to be investigated. In other words, the centers of carrier tip, tip, and sample are located on a straight line.

In contrast to the teachings of Andreoli et al., the present invention clearly and particularly claims a tip off center with regard to the carrier/cantilever. The tip is placed at a corner of the carrier, with a part extending over and being affixed to a side surface of the carrier

and a part to the "top"-surface. This arrangement is clearly illustrated in FIG. 1 and is indicated by using the term "lateral" or "laterally" in the claims. As a consequence of this arrangement, the centers of carrier, tip, and sample are no longer located in a straight line, but rather the center of the carrier is offset. It should be further mentioned that the working direction of the tip/carrier arrangement shown in FIG. 1 of the present invention is horizontal, i.e., parallel to a line of print. It is this novel tip arrangement which allows a specific method of production which results in even sharper, and thus better, tips than before. This fact is explained in the specification, shown in FIG. 1, and is the subject of pending claims 1-10.

However, in order to more clearly define the offset nature of the tip, claim 11 has been amended to specifically note "a carrier and a tip of a hardened photosensitive resist produced and/or mounted laterally at or on said carrier and offset from the center of said carrier, the latter forming the cantilever of said scanning probe microscope". As a result of this amendment, Applicants respectfully traverse the Examiner's grounds for rejection with respect to claim 11. Claim 11 is therefore believed to be in condition for allowance. Likewise, claim 12, depending as it does upon allowable claim 11, is likewise believed to be in condition for allowance.

The Examiner additionally rejected claims 11 and 16 as being anticipated by Van der Weide (5,936,237). Much like the description of Andreoli et al. above, Van der Weide similarly discloses a structure whereby a "normal" arrangement is shown wherein the tip is placed in the usual way on a surface of the carrier/cantilever in the latter's direction of use, i.e., on a carrier surface vis-a-vis the sample. For the reasons noted above with respect to Andreoli et al., Van der Weide neither teaches nor recites "a carrier and a tip of a hardened photosensitive resist produced and/or mounted laterally at or on said carrier *and offset from the center of said carrier ...*" (emphasis added). As a result, Van der Weide neither teaches nor recites the central element of claim 11. Applicants therefore respectfully traverse the Examiner's grounds for rejection with respect to claim 11. Claim 11 is therefore believed to be in condition for allowance. As claim 16 depends upon claim 11, claim 11 now believed to be in condition for allowance, claim 16 is likewise believed to be in condition for allowance.

Lastly, the Examiner rejected claims 13 and 14 as being anticipated by Tench et al. (5,461,907). The Examiner notes that Tench et al. teaches the elements of claim 13.

Applicants respectfully disagree with the Examiner's contention in light of the amendments to claim 13 submitted herein. Specifically, for the reasons cited above, Tench et al. neither teaches nor recites a probe having a cantilever and a tip mounted "laterally at or on said cantilever and offset from the center of said cantilever". As a result, Tench et al. neither teach nor recite a central element of claim 13. Applicant therefore respectfully traverses the Examiner's grounds rejection with respect to claim 13. Claim 13 is therefore believed to be in condition for allowance. Claim 14 is cancelled herein and therefore the Examiner's rejection of claim 14 is rendered moot.

Allowable Subject Matter

The Examiner noted once again that claims 1-10 and 15 are allowable.

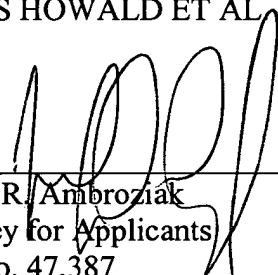
An earnest and thorough attempt has been made by the undersigned to resolve the outstanding issues in this case and place same in condition for allowance. If the Examiner has any questions or feels that a telephone or personal interview would be helpful in resolving any outstanding issues which remain in this application after consideration of this amendment, the Examiner is courteously invited to telephone the undersigned and the same would be gratefully appreciated.

It is submitted that the claims as amended herein patentably define over the art relied on by the Examiner and early allowance of same is courteously solicited.

----- If any additional fees are required in connection with this case, it is respectfully requested -----
that they be charged to Deposit Account No. 02-0184.

Respectfully submitted,

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I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: "Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313" on November 26, 2003


Antoinette Sullo